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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,843	10/19/2001	Mark DeSilets	US 018172	2507

7590

10/08/2003

Corporate Counsel
Philips Electronics North America Corporation
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EXAMINER

MANTIS MERCADER, ELENI M

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,843

Applicant(s)

DESILETS ET AL. CS

Examiner

Eleni Mantis Mercader

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/20/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1&6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by McKinnon'127.

Regarding claims 1-4 and 9, McKinnon'127 teaches a medical imaging apparatus, comprising:

a first imaging device for obtaining one or more tomographic images of a subject patient, wherein at least a portion of the first imaging device has a bore through which a patient axially translates during formation of one or more images by the device (see in Figure 1, element 20, having bores 22 and 24; also see col. 3, lines 5-19);

a second imaging device for obtaining one or more tomographic images of the subject patient, wherein at least a portion of the second imaging device has a bore through which a patient axially translates during formation of the images by the device (see in Figure 1, system 18; also see in col. 3, lines 20-32 wherein the c-arm forms a bore there-through which the patient is axially translated);

the first and second imaging devices, each secured by a housing in a fixed position relative to the other during the formation of one or more images of the subject patient, wherein

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the bore of each device is substantially aligned axially with the bore of the other; and the bores of the first and second imaging devices are spaced apart by a distance sufficient to allow direct access by a caregiver to a subject patient, positioned between the first and second imaging devices (see Figure 1, indicating all the elements and see area 26 which constitutes the access area for surgical procedures; see col. 3, line 8, describing the area 26 as access area and see col. 3, lines 29-32; referring to the surgical team. It is evident that the professionals can have line-of-sight visual contact with a patient that is aligned with the imaging axis and extends between the first and second imaging devices as the indicated by the access area 26 located between the two imaging modalities).

Regarding claim 5, McKinnon' 127 teaches the use of a patient access area allowing a caregiver to perform one or more interventional applications on the subject patient between the first and second imaging devices (see col. 7, lines 9-54).

Regarding claim 7, the first medical imaging device is an MRI (see col. 3, line 5).

3. Claims 3, 7-9, and 11-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Townsend et al.' 476.

Regarding claims 3, 7-8, 11-16 and 17-21 Townsend et al.' 476 teach a medical imaging apparatus, comprising:

a first tomographic medical imaging device having an opening for receipt of a subject patient, the first imaging device comprises one of a group consisting of CT, MRI, X-Ray, and Ultrasound devices wherein the imaging information represents anatomical structure(see col. 12, line 49; referring to X-ray CT detector 12 in the first imaging device having an opening 16a; see element 16a in Figure 2b);

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a second tomographic medical imaging device having an opening for receipt of the subject patient and the second imaging device comprises one of a group consisting of SPECT and PET devices wherein the imaging information represents physiological functions of the patient (see col. 12, line 50; referring to PET detector 14 in the second imaging device see element 16b in Figure 2b);

an imaging device support structure securing the openings of the first and second imaging devices in a fixed spatial relationship and in alignment with an imaging axis during the formation of one or more tomographic images, by at least one of the imaging devices, of the subject patient (see col. 12, lines 49-53);

a patient support structure extending through the openings of the first and second imaging devices during the formation of one or more images by at least one of the imaging devices; and the imaging device support structure forming a patient access area between the first and second imaging devices through which a caregiver can directly observe the subject patient between the openings of the first and second imaging devices (see the space provided in-between the CT and PET imagers).

Regarding claims 9 and 12, Townsend et al.'476 teach the axes of openings of the first and second imaging devices being substantially aligned (see Figure 2b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over McKinnon'127.

Regarding claim 6, while McKinnon'127 does not explicitly teach use of the apparatus while performing a biopsy procedure, McKinnon'127 contemplates use while performing surgical procedures of interest (see col. 7, lines 9-54). It would have been obvious to one skilled in the art at the time that the invention was made to have utilized the apparatus during a surgical procedure if that was the surgical procedure of interest.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Townsend et al.'476.

Regarding claims 4-6, while Townsend et al.'476 do not specifically address the application of the apparatus for con-current surgical procedures, Townsend et al.'476 describes the improvements in imaging quality to provide precise localization of lesions for biopsy procedures (see col. 20, lines 3-11).

It would have been obvious to one skilled in the art at the time that the invention was made to have utilized the system to guide surgical procedures, as it is well known to skilled artisans to use imaging allowing for more precise procedures in surgery.

7. Claims 10 and 22-29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Townsend et al.'476 in view of Dinkler'927.

Regarding claim 10, Townsend et al.'476 teach all the features of the instant invention except for a fluid control surface positioned beneath the patient support structure and between the first and second imaging devices for directing liquids falling onto the surface from the vicinity of the patient support structure away from the subject patient.

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In the same field of endeavor, Dinkler'927 teaches a fluid control surface positioned beneath the patient support structure and between the first and second imaging devices for directing liquids falling onto the surface from the vicinity of the patient support structure away from the subject patient (see in Dinkler'927, paragraph 0051, wherein the opening on the support structure of the patient has an opening 34 for drainage).

It would have been obvious to one skilled in the art at the time that the invention was made to have modified Townsend et al.'476 and incorporated the feature of Dinkler'927 through the support table in order to allow for drainage in surgical procedures guided by imaging, while the patient is transferred in the imaging areas and in-between those areas. The drainage surface descriptions such as downward and away from the patient would have been obvious modifications to skilled artisans since that is normally how liquids are drained, namely, downward and away from the patient.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni Mantis Mercader whose telephone number is 703 308-0899. The examiner can normally be reached on Mon. - Fri., 8:00 a.m.-6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on 703 308-2262. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0858.


Eleni Mantis Mercader
Patent Examiner
Art Unit 3737

EMM